

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL112018\
 Data File : VL032805.D
 Acq On : 21 Nov 2018 8:31
 Operator : SY/AP
 Sample : J5998-05
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 EP-104

Manual Integrations
 APPROVED

MMDadoda
 11/26/2018 9:19:10 AM

Quant Time: Nov 22 12:48:36 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Nov 14 2018
 QLast Update : Wed Nov 14 07:00:23 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1384737	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3680538	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3388906	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	2674986	10.55	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	98928	0.497	ppbv	91
3) Chlorodifluoromethane	3.02	51	34692m	0.316	ppbv	
4) Chloromethane	3.18	50	31061	0.510	ppbv	88
9) Propene	3.05	41	96032m	2.186	ppbv	
11) Trichlorofluoromethane	4.01	101	46713m	0.249	ppbv	
13) Ethanol	3.67	45	2092686	145.428	ppbv	99
15) Acetone	3.91	43	1274662	10.080	ppbv	92
19) Isopropyl Alcohol	4.05	45	187170	2.222	ppbv #	1
20) Methylene Chloride	4.42	84	303970	4.643	ppbv	92
26) Hexane	5.79	57	217573	1.658	ppbv #	66
30) Cyclohexane	7.26	84	15833m	0.138	ppbv	
34) 2-Butanone	5.34	43	143003	0.749	ppbv	100
35) Carbon Tetrachloride	7.14	117	20500m	0.069	ppbv	
36) Benzene	7.01	78	108239	0.369	ppbv #	94
44) 2,2,4-Trimethylpentane	8.00	57	52632	0.107	ppbv #	64
52) Tetrachloroethene	11.38	164	4553m	0.045	ppbv	
53) Toluene	9.95	91	882717	2.887	ppbv	99
58) Ethyl Benzene	12.87	91	48704	0.119	ppbv	92
59) m/p-Xylene	13.13	91	146598m	0.404	ppbv	
60) o-Xylene	13.87	91	57787m	0.158	ppbv	
61) Styrene	13.69	104	22606m	0.095	ppbv	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

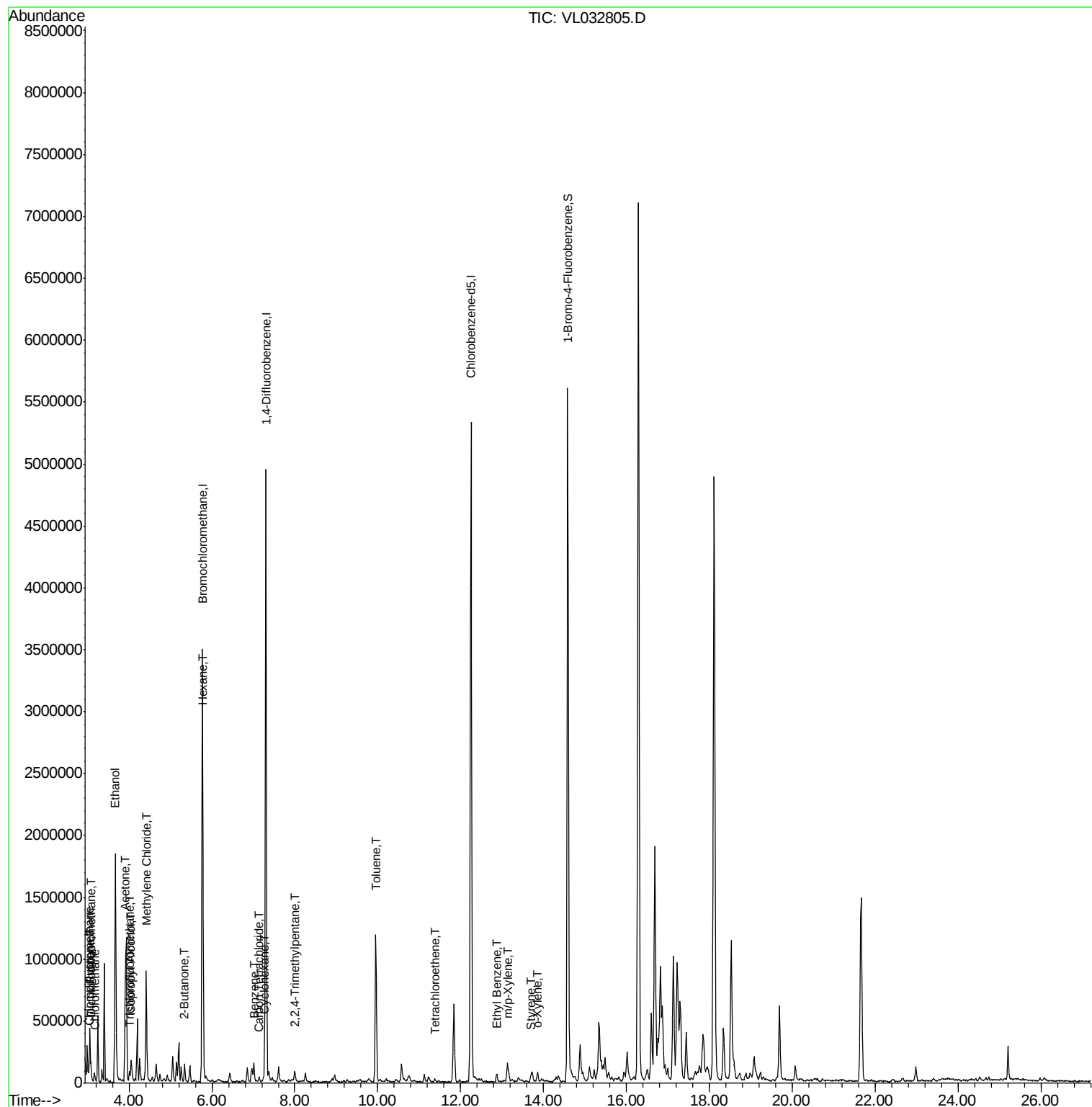
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL112018\
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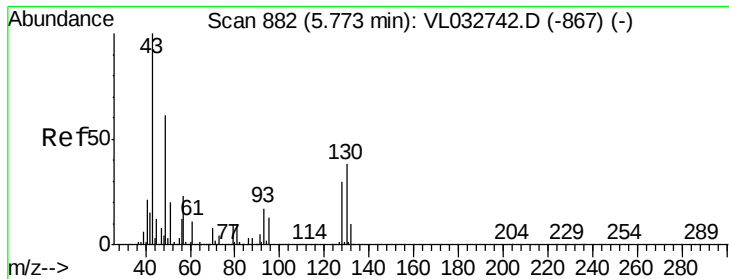
Instrument :
MSVOA_L
ClientSampleId :
EP-104

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Quant Time: Nov 22 12:48:36 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 14 07:00:23 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 880

Delta R.T. -0.01 min

Lab File: VL032805.D

Acq: 21 Nov 2018 8:31

Instrument :

MSVOA_L

ClientSampled :

EP-104

Tot Ion: 49 Resp: 1384737

Ion Ratio Lower Upper

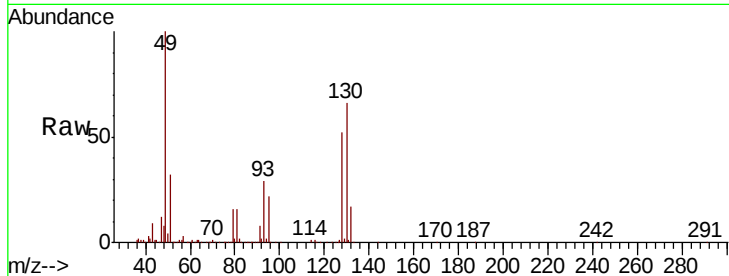
49 100

128 53.2 24.9 74.6

130 69.3 31.4 94.2

Manual Integrations
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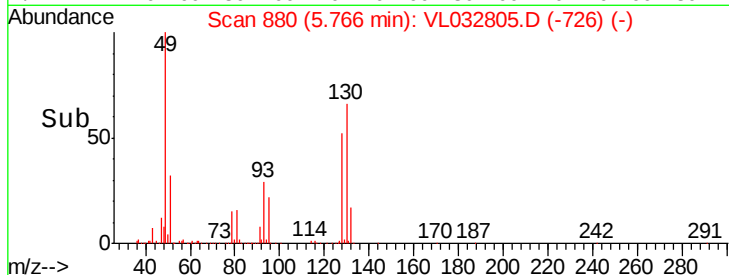


Abundance Ion 49.10 (48.80 to 49.80): VL0

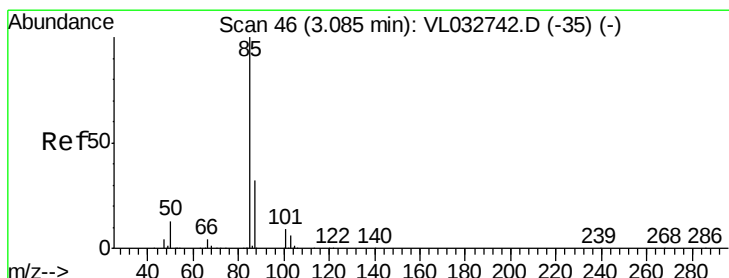
Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V

Time-->



Time-->



#2

Dichlorodifluoromethane

Concen: 0.497 ppbv

RT: 3.08 min Scan# 45

Delta R.T. -0.00 min

Lab File: VL032805.D

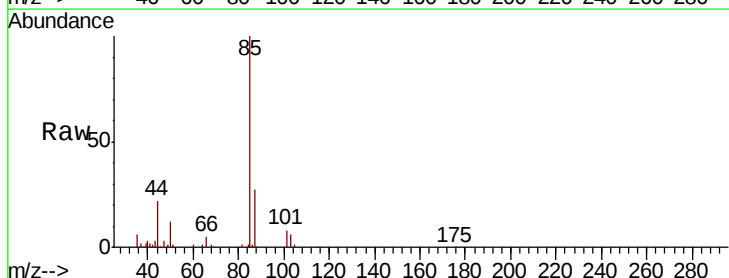
Acq: 21 Nov 2018 8:31

Tgt Ion: 85 Resp: 98928

Ion Ratio Lower Upper

85 100

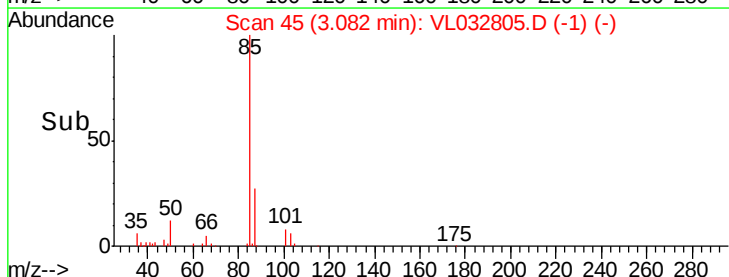
87 27.4 26.0 39.0



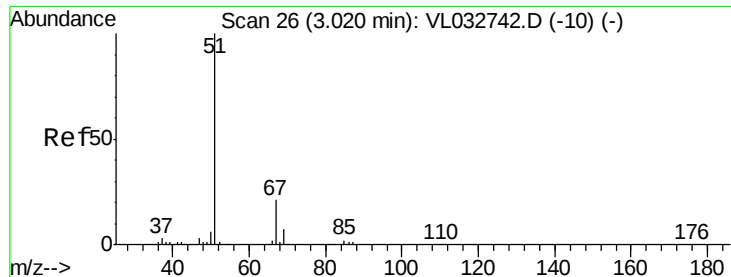
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

Time-->



Time-->



#3

Chlorodifluoromethane

Concen: 0.316 ppbv

RT: 3.02 min Scan# 27

Delta R.T. 0.00 min

Lab File: VL032805.D

Acq: 21 Nov 2018 8:31

Instrument :

MSVOA_L

ClientSampleId :

EP-104

Tot Ion: 51 Resp: 34692

Ion Ratio Lower Upper

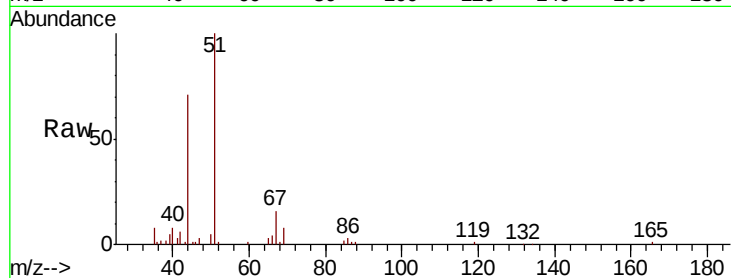
51 100

67 25.6 16.1 24.1#

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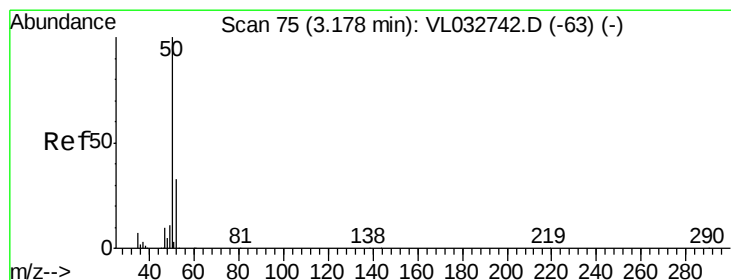
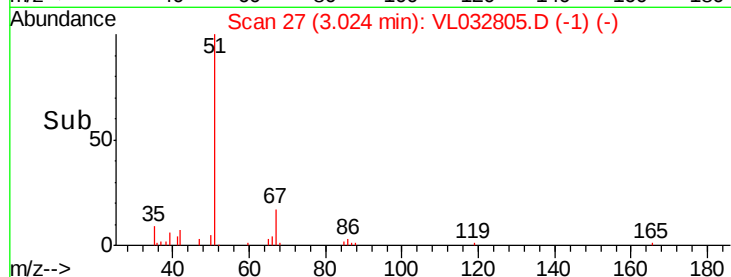
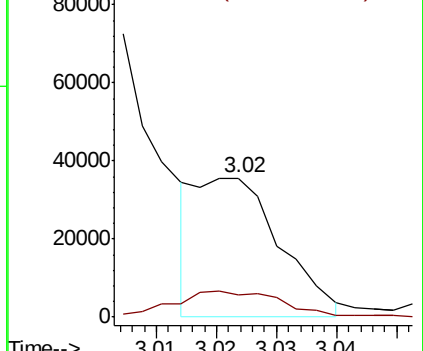
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.510 ppbv

RT: 3.18 min Scan# 76

Delta R.T. 0.00 min

Lab File: VL032805.D

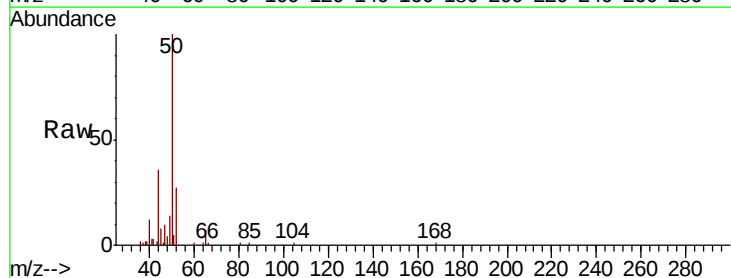
Acq: 21 Nov 2018 8:31

Tgt Ion: 50 Resp: 31061

Ion Ratio Lower Upper

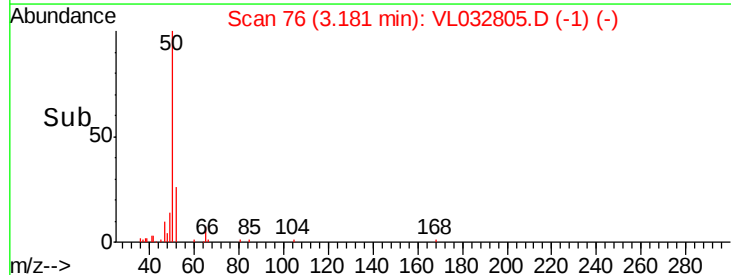
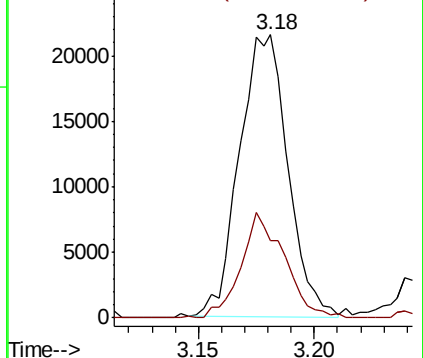
50 100

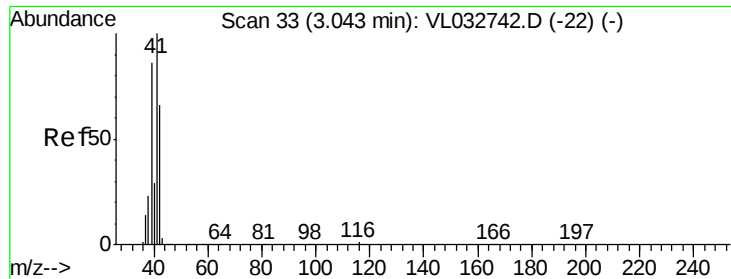
52 26.8 26.6 40.0



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 2.186 ppbv m

RT: 3.05 min Scan# 36

Delta R.T. 0.01 min

Lab File: VL032805.D

Acq: 21 Nov 2018 8:31

Instrument :

MSVOA_L

ClientSampleId :

EP-104

Tot Ion: 41 Resp: 96032

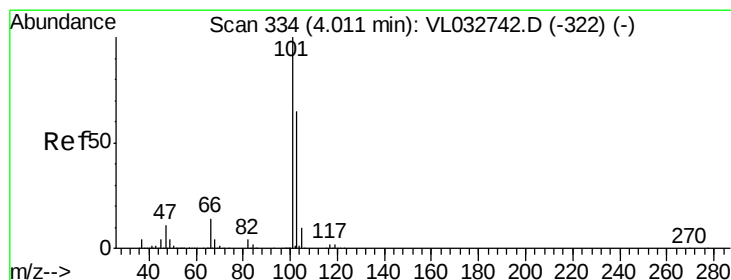
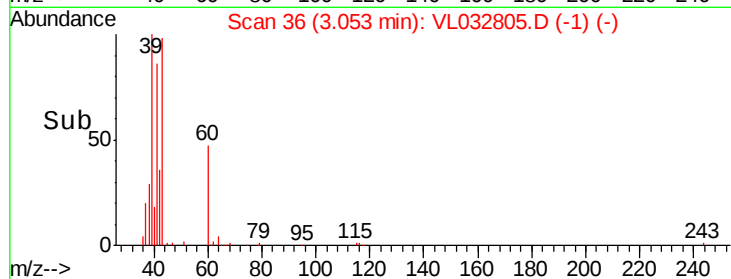
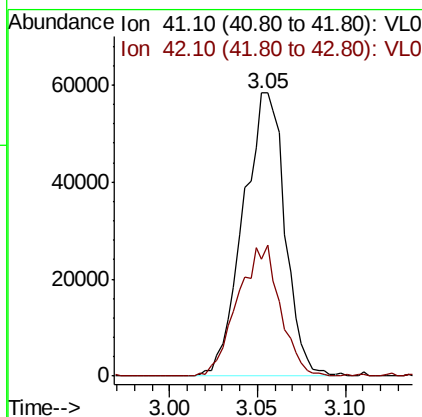
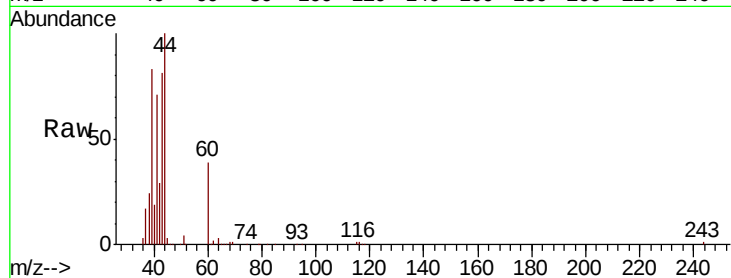
Ion Ratio Lower Upper

41 100

42 91.8 55.0 82.6#

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#11

Trichlorofluoromethane

Concen: 0.249 ppbv m

RT: 4.01 min Scan# 335

Delta R.T. 0.00 min

Lab File: VL032805.D

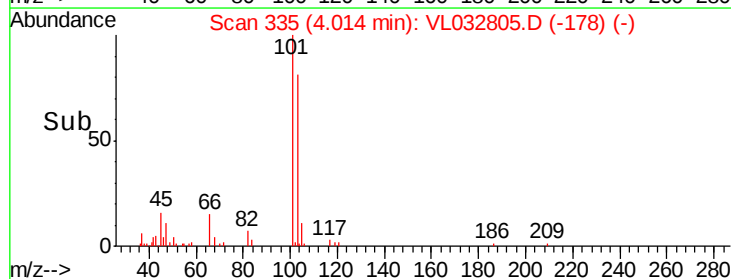
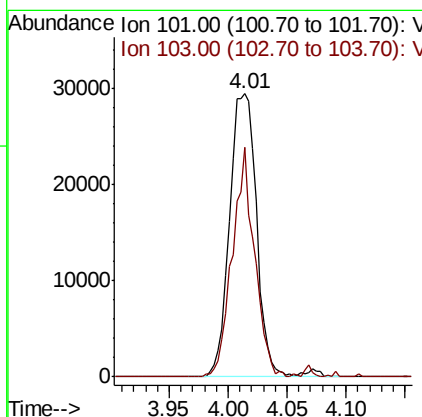
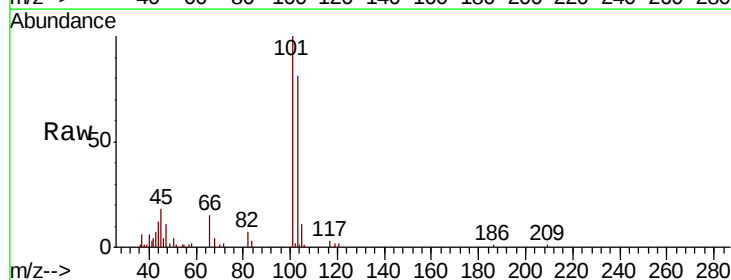
Acq: 21 Nov 2018 8:31

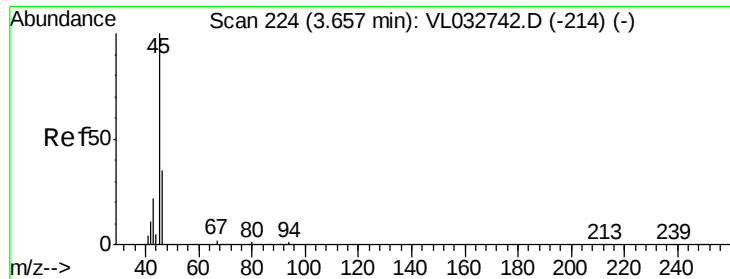
Tgt Ion: 101 Resp: 46713

Ion Ratio Lower Upper

101 100

103 80.9 51.6 77.4#





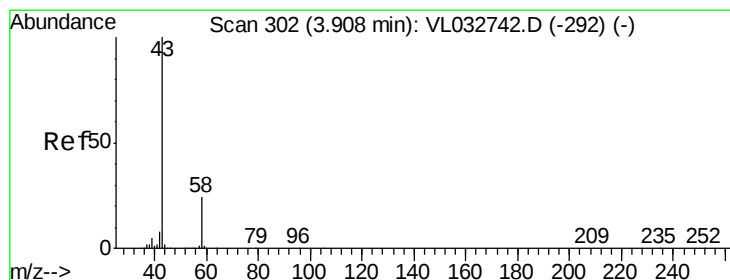
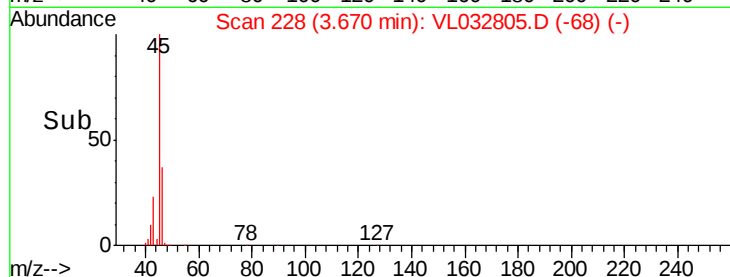
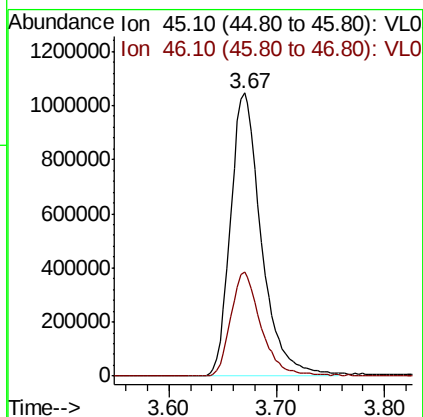
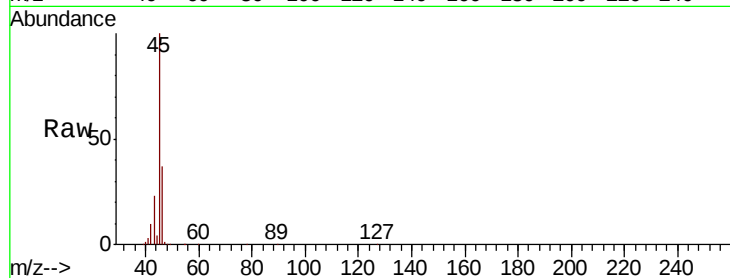
#13
Ethanol
Concen: 145.428 ppbv
RT: 3.67 min Scan# 228
Delta R.T. 0.01 min
Lab File: VL032805.D
Acq: 21 Nov 2018 8:31

Instrument :
MSVOA_L
ClientSampled :
EP-104

Tot Ion: 45 Resp: 2092686
Ion Ratio Lower Upper
45 100
46 36.6 14.5 57.9

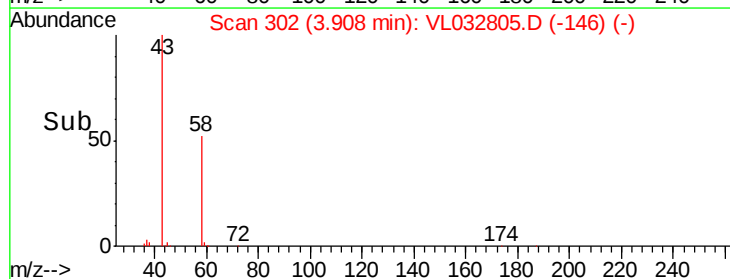
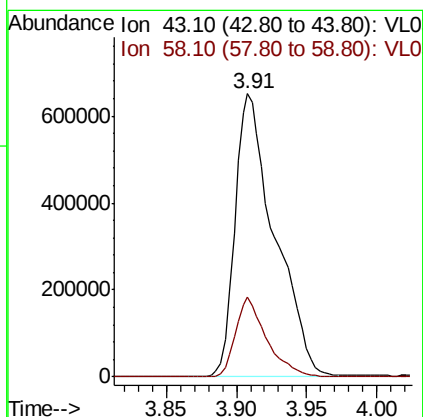
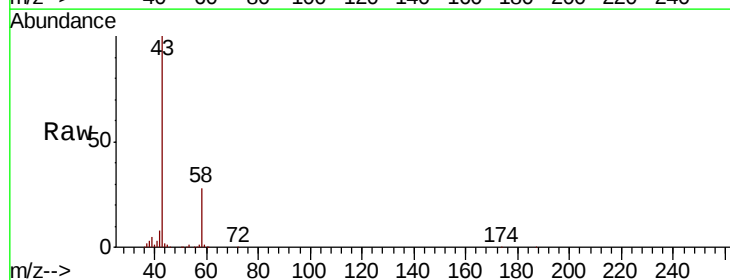
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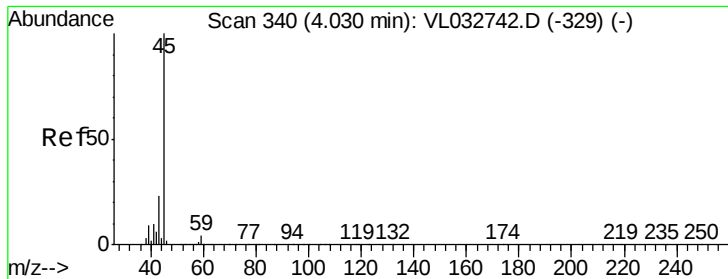
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#15
Acetone
Concen: 10.080 ppbv
RT: 3.91 min Scan# 302
Delta R.T. 0.00 min
Lab File: VL032805.D
Acq: 21 Nov 2018 8:31

Tgt Ion: 43 Resp: 1274662
Ion Ratio Lower Upper
43 100
58 22.2 21.1 31.7





#19

Isopropyl Alcohol

Concen: 2.222 ppbv

RT: 4.05 min Scan# 345

Delta R.T. 0.02 min

Lab File: VL032805.D

Acq: 21 Nov 2018 8:31

Instrument :

MSVOA_L

ClientSampled :

EP-104

Tot Ion: 45 Resp: 187170

Ion Ratio Lower Upper

45 100

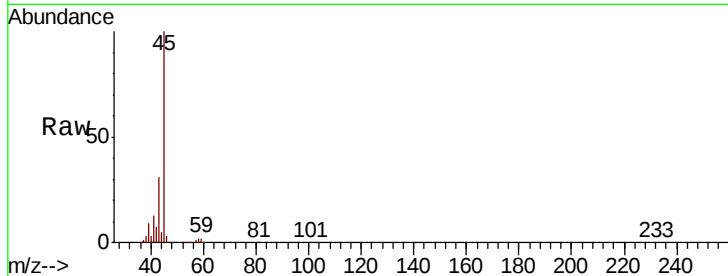
58 152.2 1.4 2.0#

Manual Integrations

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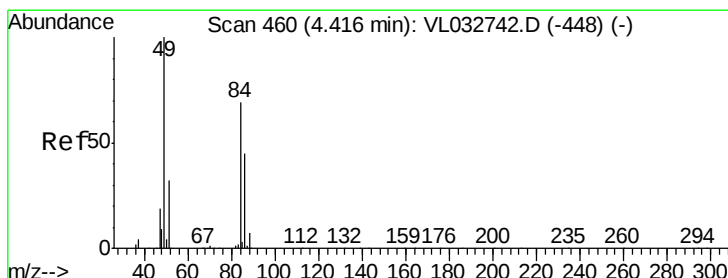
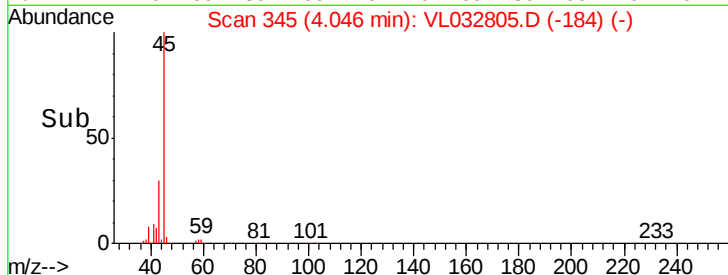
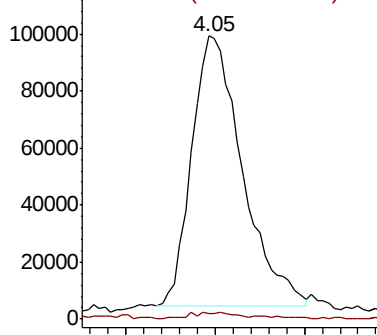
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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 4.643 ppbv

RT: 4.42 min Scan# 460

Delta R.T. 0.00 min

Lab File: VL032805.D

Acq: 21 Nov 2018 8:31

Tgt Ion: 84 Resp: 303970

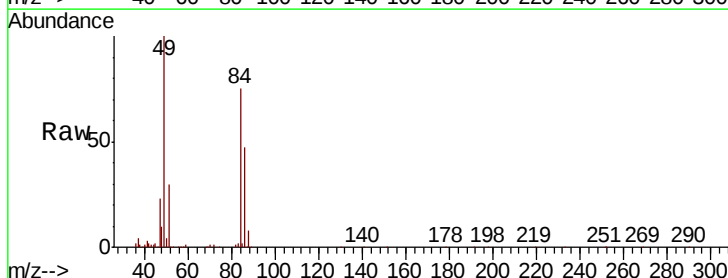
Ion Ratio Lower Upper

84 100

49 133.4 115.8 173.6

51 39.7 36.9 55.3

86 62.9 52.4 78.6

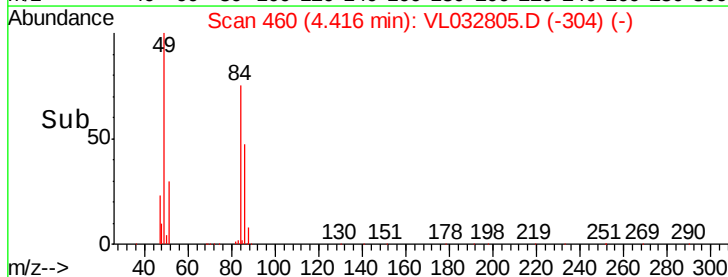
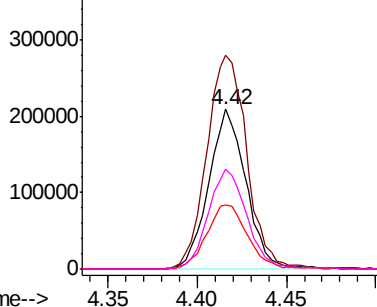


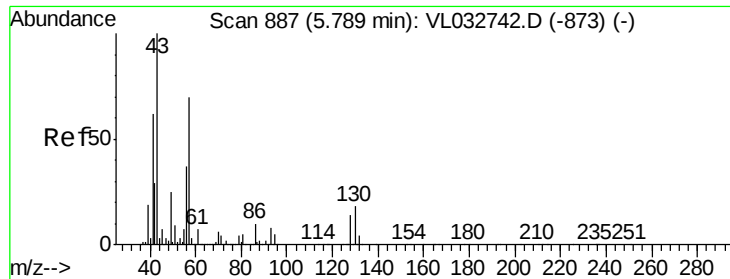
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0





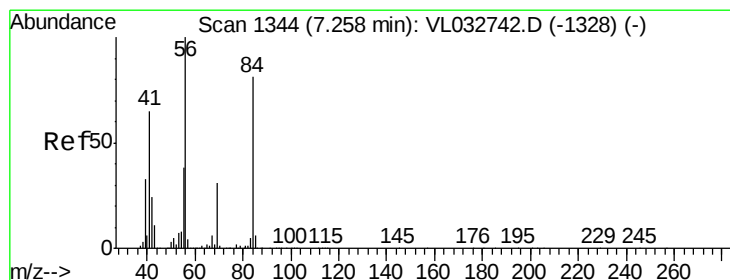
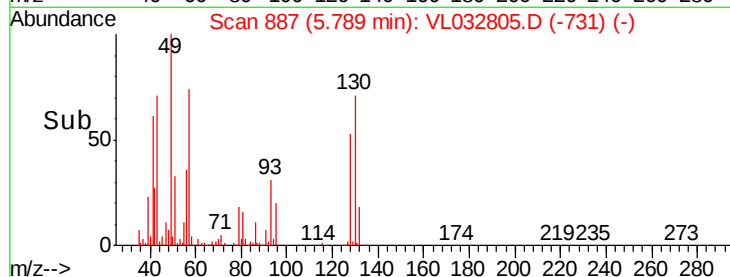
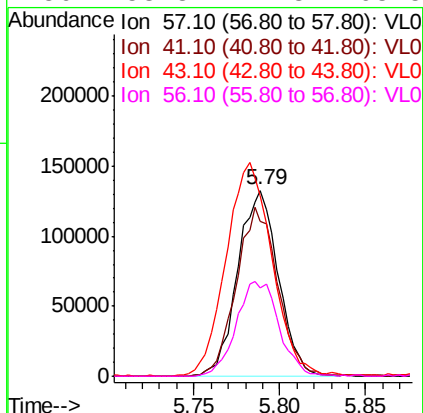
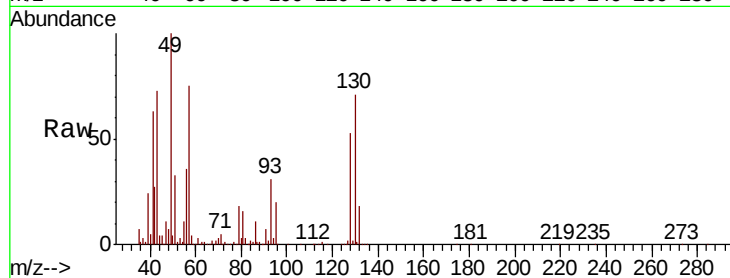
#26
Hexane
Concen: 1.658 ppbv
RT: 5.79 min Scan# 887
Delta R.T. 0.00 min
Lab File: VL032805.D
Acq: 21 Nov 2018 8:31

Instrument :
MSVOA_L
ClientSampleID :
EP-104

Tot Ion	Ratio	Resp	Lower	Upper
57	100	217573		
41	93.8	70.3	105.5	
43	132.9	174.0	261.0	
56	53.8	42.3	63.5	

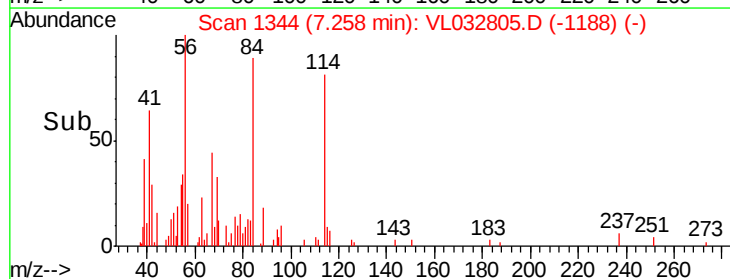
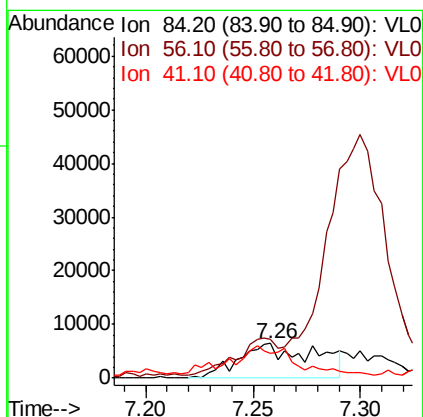
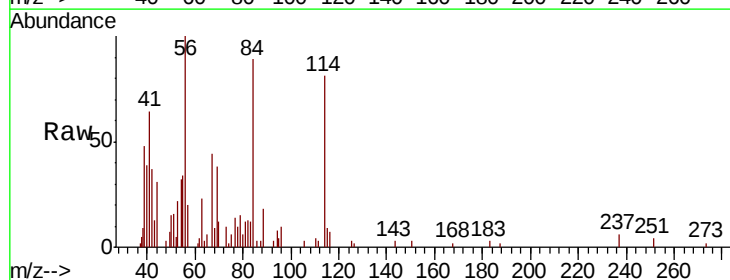
Manual Integrations
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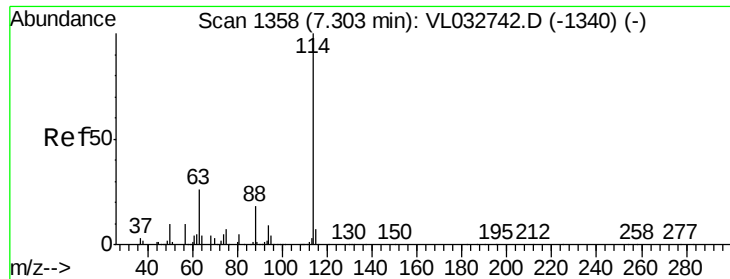
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#30
Cyclohexane
Concen: 0.138 ppbv m
RT: 7.26 min Scan# 1344
Delta R.T. 0.00 min
Lab File: VL032805.D
Acq: 21 Nov 2018 8:31

Tgt Ion	Ratio	Resp	Lower	Upper
84	100	15833		
56	0.0	105.0	157.4	
41	110.7	65.3	97.9	





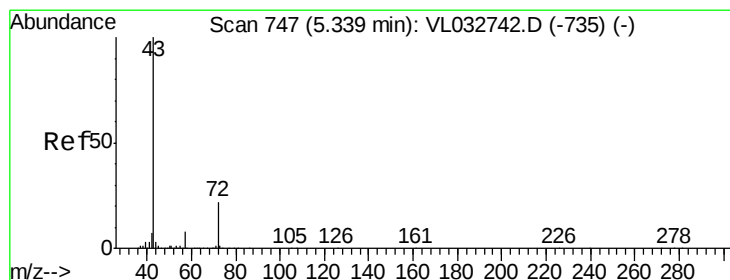
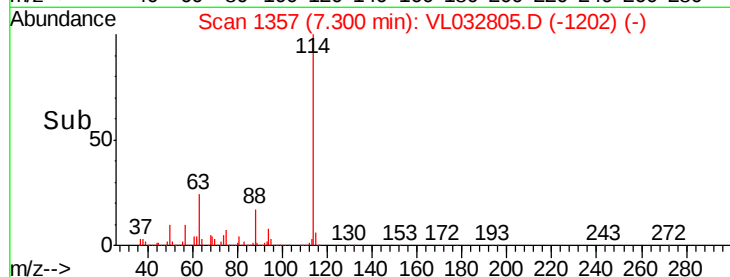
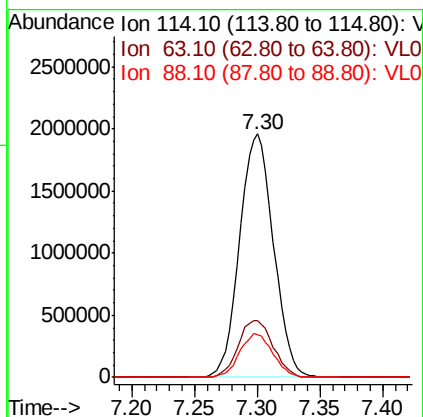
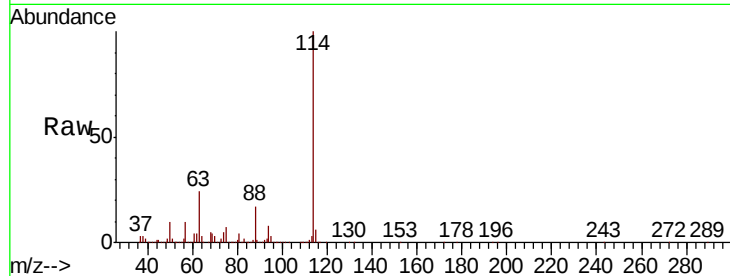
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.30 min Scan# 1357
 Delta R.T. -0.00 min
 Lab File: VL032805.D
 Acq: 21 Nov 2018 8:31

Instrument :
 MSVOA_L
 ClientSampleId :
 EP-104

Tot Ion	Ratio	Lower	Upper
114	100		
63	24.1	20.9	31.3
88	17.8	14.4	21.6

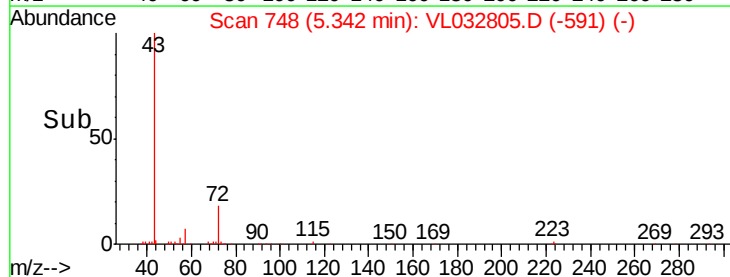
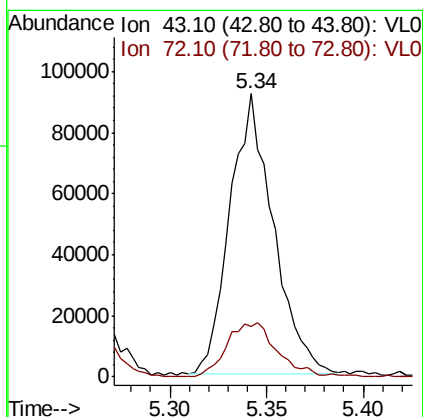
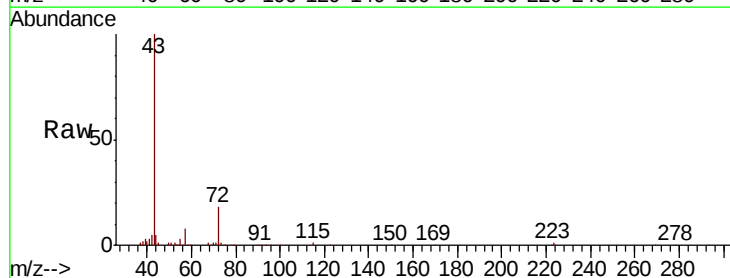
Manual Integrations
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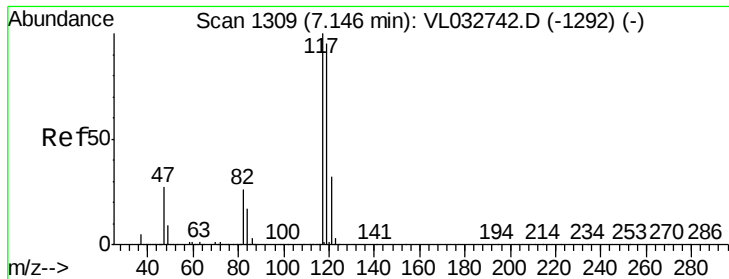
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 11/26/2018 9:19:10 AM



#34
 2-Butanone
 Concen: 0.749 ppbv
 RT: 5.34 min Scan# 748
 Delta R.T. 0.00 min
 Lab File: VL032805.D
 Acq: 21 Nov 2018 8:31

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.1	18.4	27.6





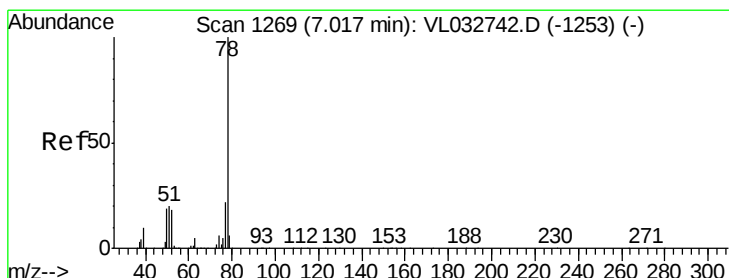
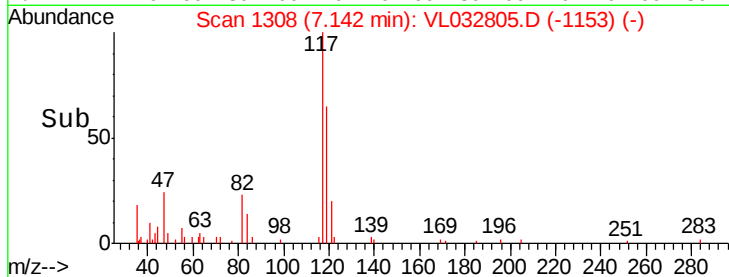
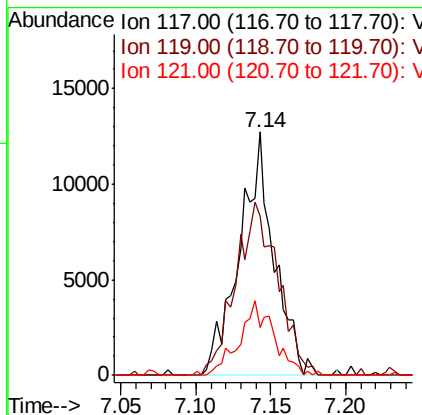
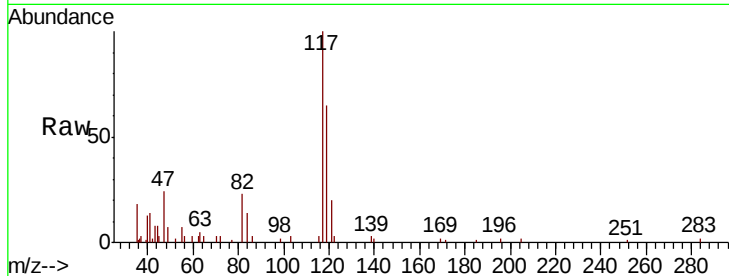
#35
Carbon Tetrachloride
Concen: 0.069 ppbv m
RT: 7.14 min Scan# 1308
Delta R.T. -0.00 min
Lab File: VL032805.D
Acq: 21 Nov 2018 8:31

Instrument :
MSVOA_L
ClientSampled :
EP-104

Tot Ion	Ratio	Resp	Lower	Upper
117	100	20500		
119	65.4	76.1	114.1#	
121	19.7	25.4	38.0#	

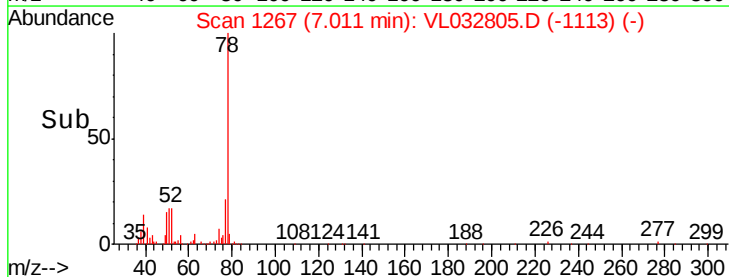
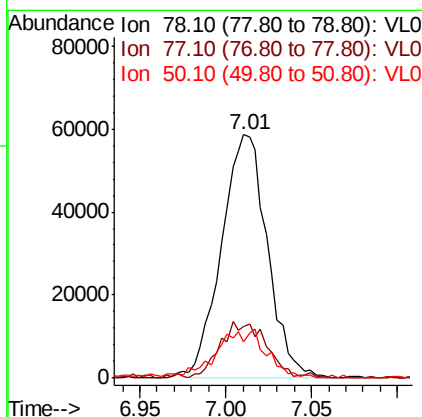
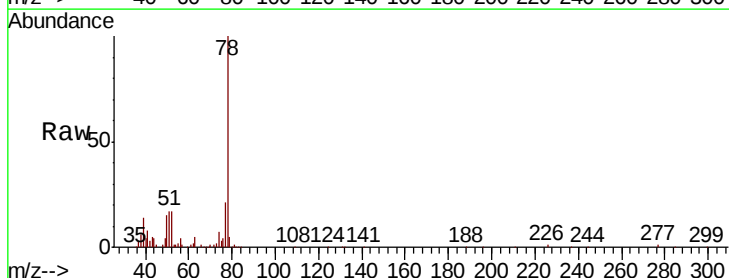
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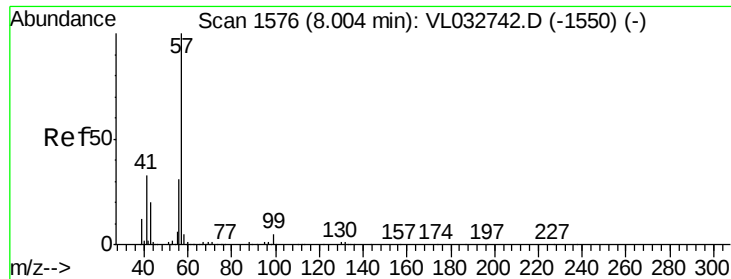
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#36
Benzene
Concen: 0.369 ppbv
RT: 7.01 min Scan# 1267
Delta R.T. -0.01 min
Lab File: VL032805.D
Acq: 21 Nov 2018 8:31

Tgt Ion	Ratio	Resp	Lower	Upper
78	100	108239		
77	21.4	17.8	26.8	
50	14.7	15.4	23.0#	





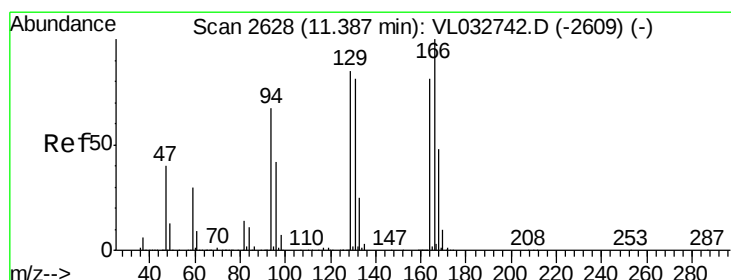
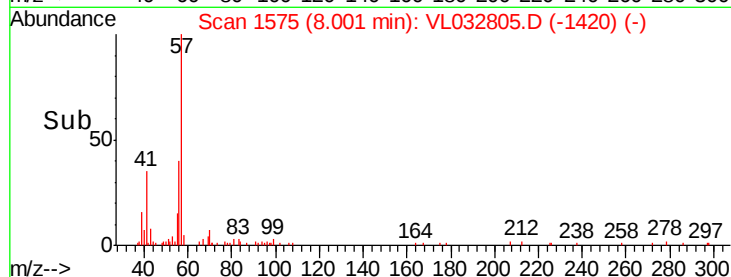
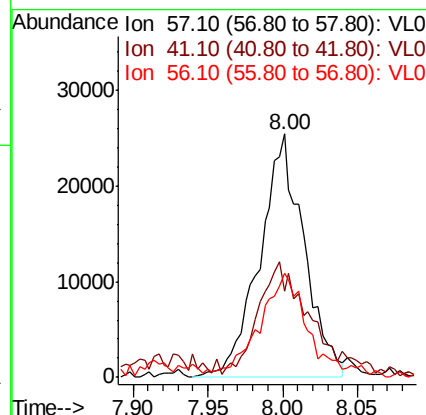
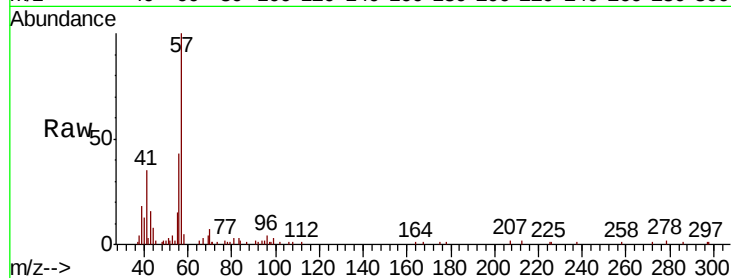
#44
2,2,4-Trimethylpentane
Concen: 0.107 ppbv
RT: 8.00 min Scan# 1575
Delta R.T. -0.00 min
Lab File: VL032805.D
Acq: 21 Nov 2018 8:31

Instrument :
MSVOA_L
ClientSampleId :
EP-104

Tot Ion	Ratio	Lower	Upper
57	100		
41	56.1	26.6	39.8#
56	47.7	24.8	37.2#

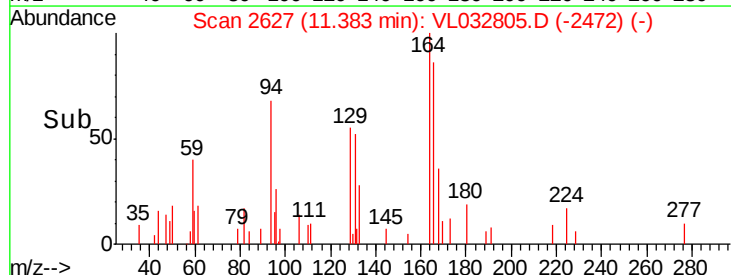
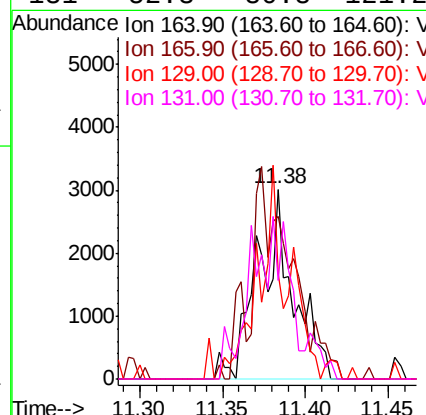
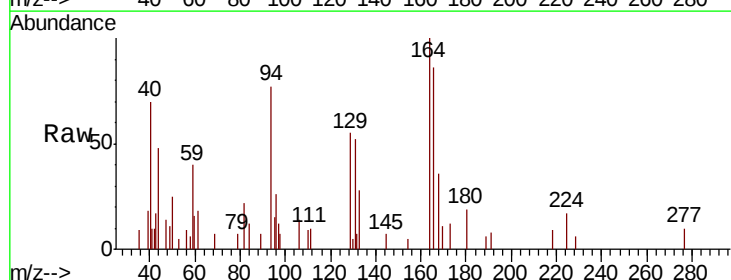
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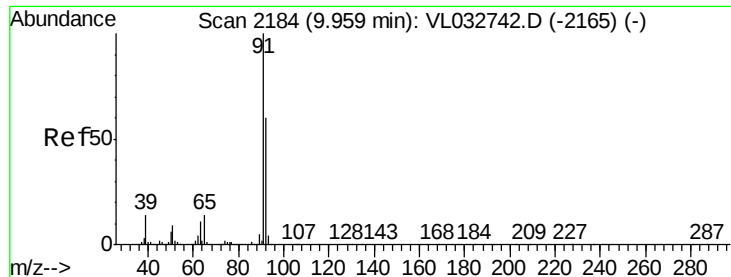
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#52
Tetrachloroethene
Concen: 0.045 ppbv m
RT: 11.38 min Scan# 2627
Delta R.T. -0.00 min
Lab File: VL032805.D
Acq: 21 Nov 2018 8:31

Tgt Ion	Ratio	Lower	Upper
164	100		
166	86.1	99.3	148.9#
129	55.0	83.9	125.9#
131	52.3	80.8	121.2#





#53

Toluene

Concen: 2.887 ppbv

RT: 9.95 min Scan# 2182

Delta R.T. -0.01 min

Lab File: VL032805.D

Acq: 21 Nov 2018 8:31

Instrument :

MSVOA_L

ClientSampled :

EP-104

Tot Ion: 91 Resp: 882717

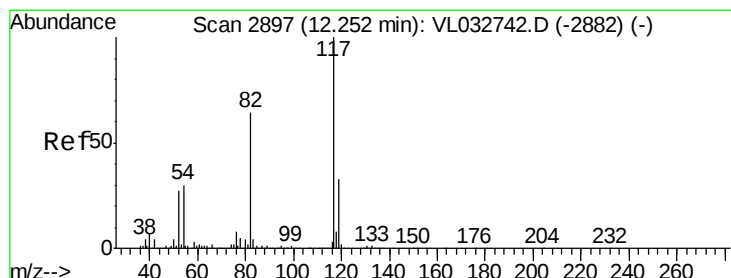
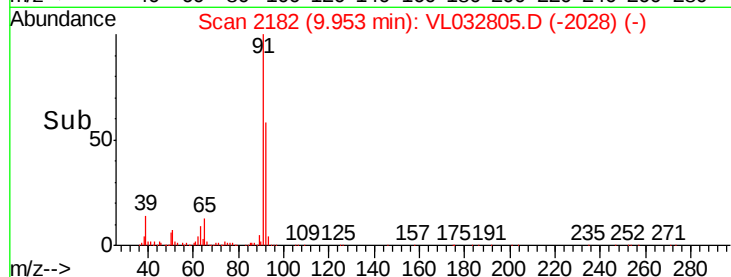
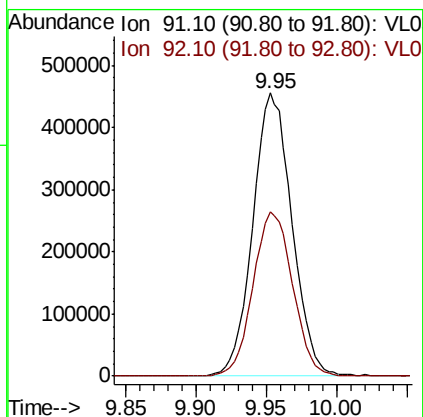
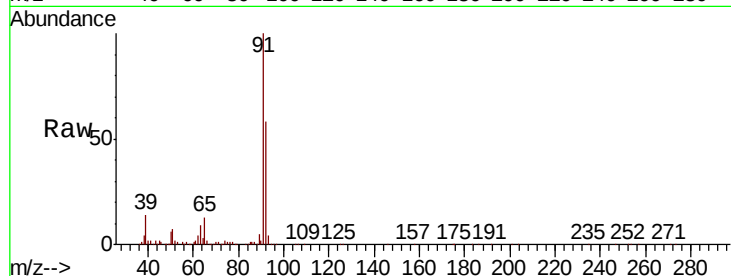
Ion Ratio Lower Upper

91 100

92 59.0 47.9 71.9

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.25 min Scan# 2896

Delta R.T. -0.00 min

Lab File: VL032805.D

Acq: 21 Nov 2018 8:31

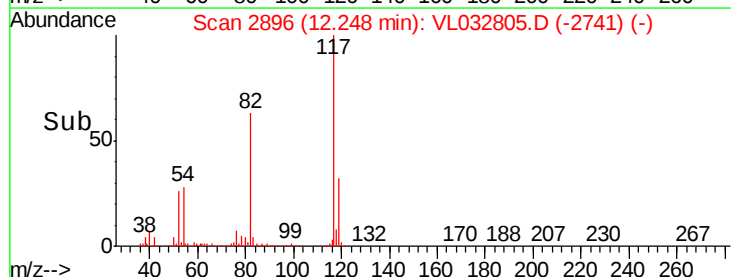
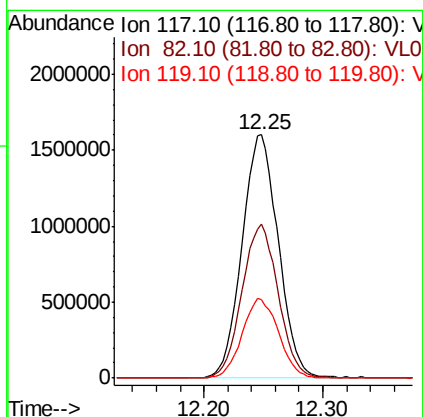
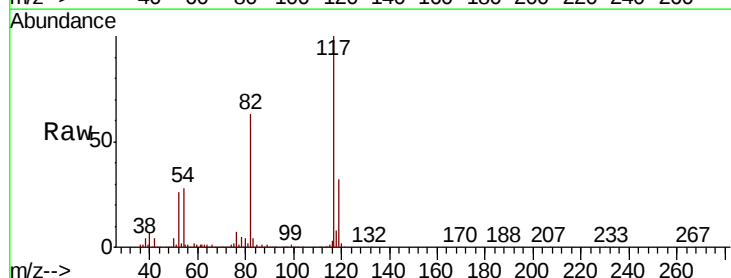
Tgt Ion: 117 Resp: 3388906

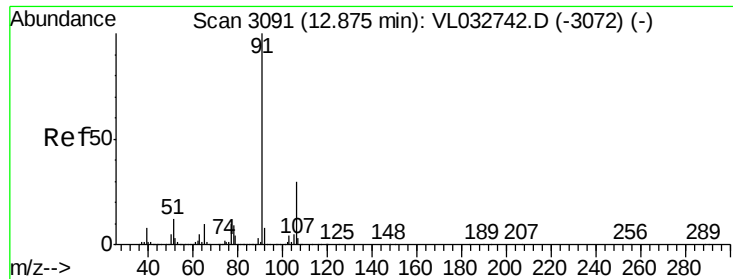
Ion Ratio Lower Upper

117 100

82 63.4 51.0 76.6

119 32.7 28.0 42.0





#58

Ethyl Benzene

Concen: 0.119 ppbv

RT: 12.87 min Scan# 3089

Delta R.T. -0.01 min

Lab File: VL032805.D

Acq: 21 Nov 2018 8:31

Instrument :

MSVOA_L

ClientSampled :

EP-104

Tot Ion: 91 Resp: 48704

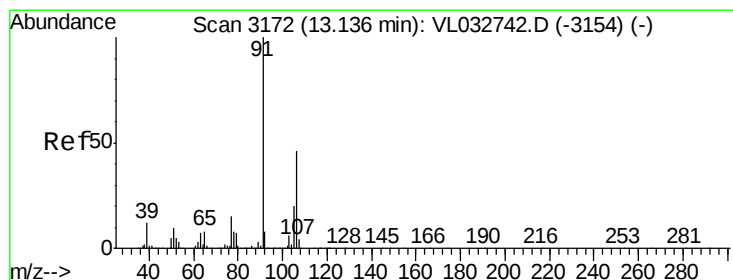
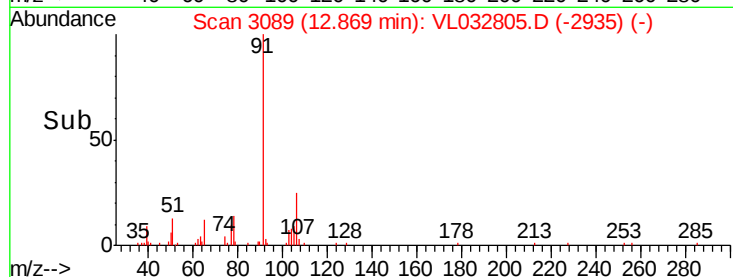
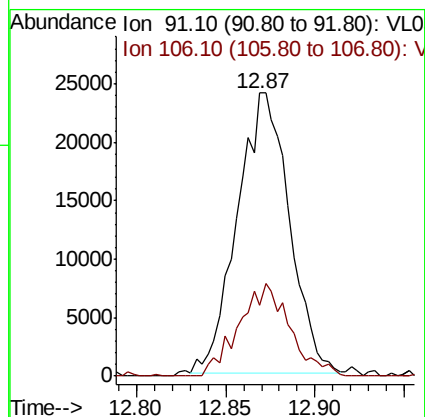
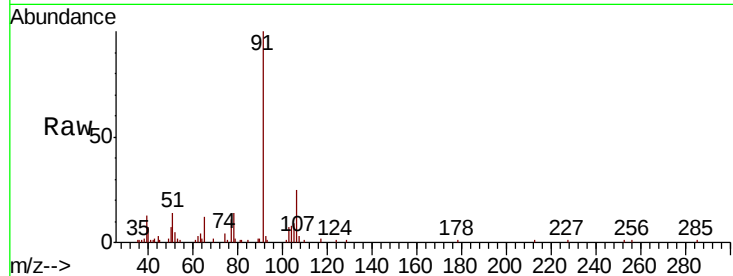
Ion Ratio Lower Upper

91 100

106 25.4 23.6 35.4

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#59

m/p-Xylene

Concen: 0.404 ppbv m

RT: 13.13 min Scan# 3170

Delta R.T. -0.01 min

Lab File: VL032805.D

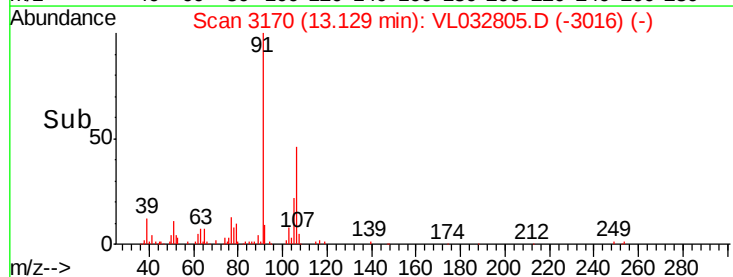
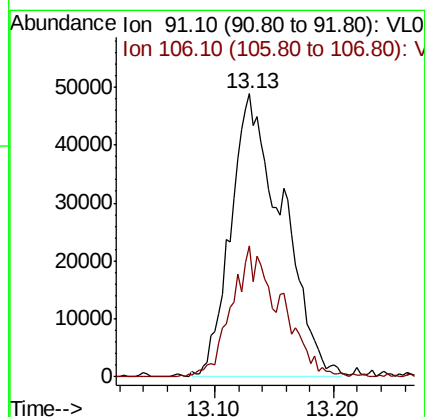
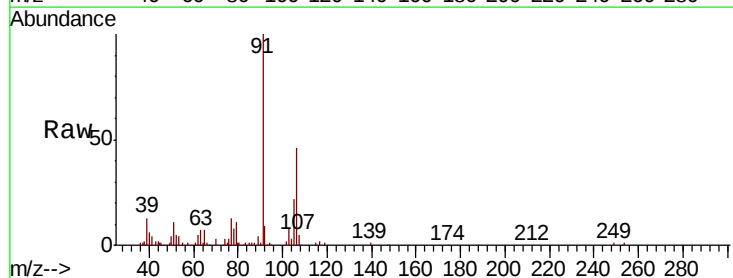
Acq: 21 Nov 2018 8:31

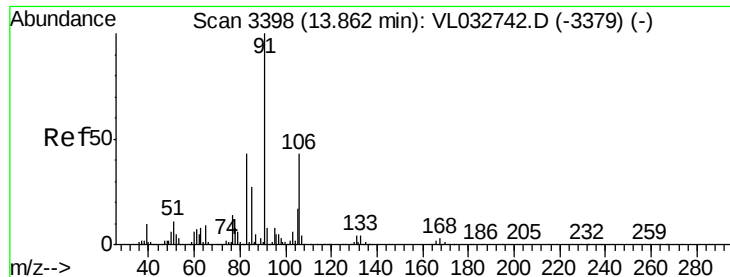
Tgt Ion: 91 Resp: 146598

Ion Ratio Lower Upper

91 100

106 43.9 36.1 54.1





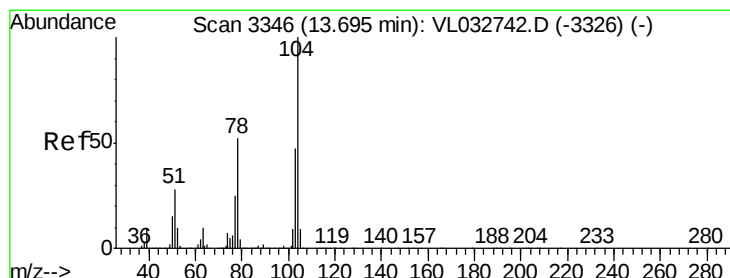
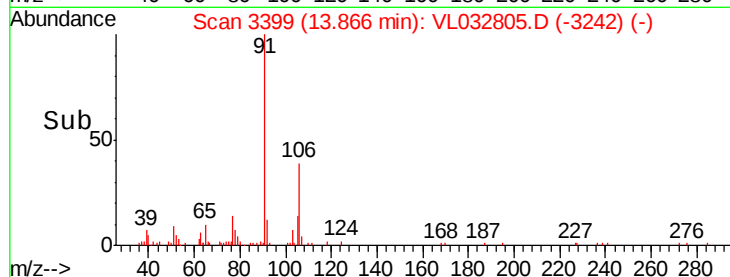
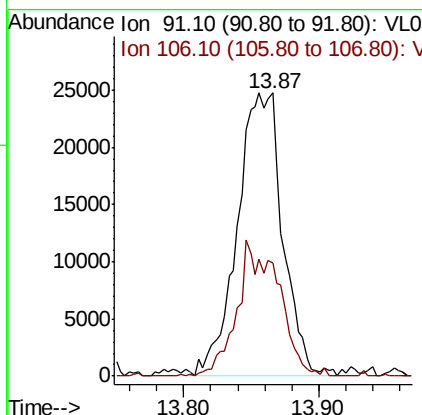
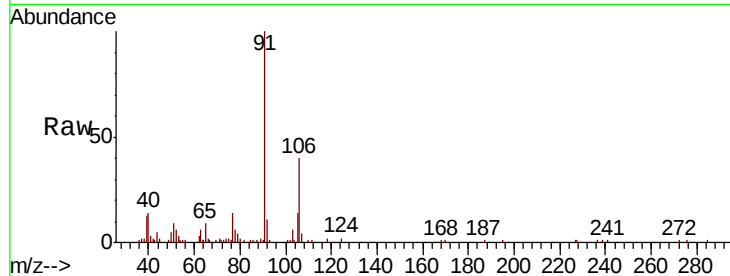
#60
o-Xylene
Concen: 0.158 ppbv m
RT: 13.87 min Scan# 3399
Delta R.T. 0.00 min
Lab File: VL032805.D
Acq: 21 Nov 2018 8:31

Instrument :
MSVOA_L
ClientSampled :
EP-104

Tot Ion: 91 Resp: 57787
Ion Ratio Lower Upper
91 100
106 0.0 21.9 65.7#

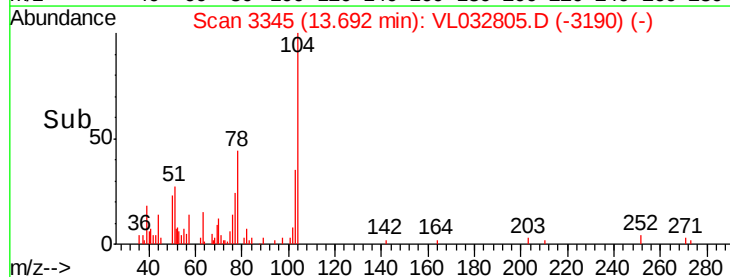
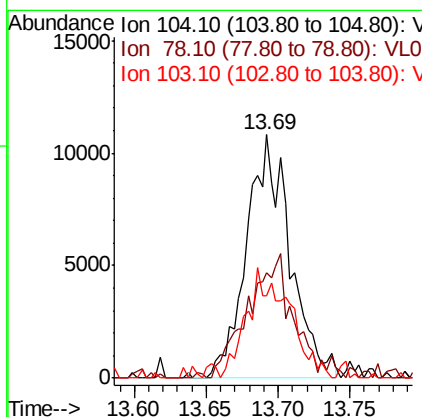
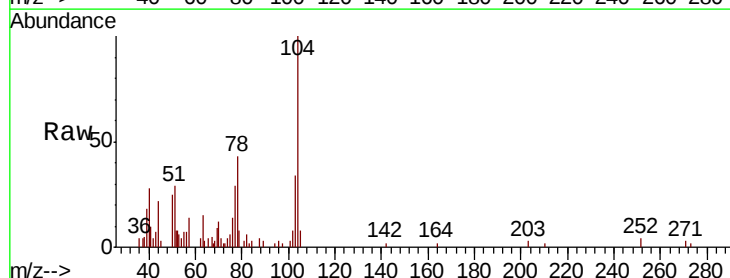
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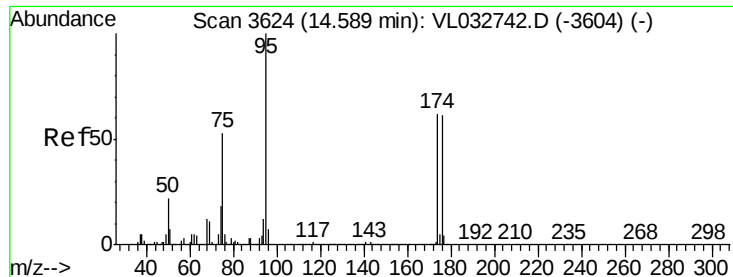
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#61
Styrene
Concen: 0.095 ppbv m
RT: 13.69 min Scan# 3345
Delta R.T. -0.00 min
Lab File: VL032805.D
Acq: 21 Nov 2018 8:31

Tgt Ion: 104 Resp: 22606
Ion Ratio Lower Upper
104 100
78 0.0 42.2 63.4#
103 0.0 38.2 57.2#





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.553 ppbv
 RT: 14.58 min Scan# 3622
 Delta R.T. -0.01 min
 Lab File: VL032805.D
 Acq: 21 Nov 2018 8:31

Instrument :
 MSVOA_L
 ClientSampleId :
 EP-104

Tot Ion: 95 Resp: 2674986
 Ion Ratio Lower Upper
 95 100
 174 66.2 50.7 76.1
 175 5.0 3.8 5.6

Manual Integrations
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 11/26/2018 9:19:10 AM

